

Two Remarkable New Genera of Diptera.

BY S. W. WILLISTON.

Townsendia, gen nov. (*Asilidae*.)

Very small species. Head broad, much broader than high. Front very broad above, about three-fourths of the width of the head; narrow below, the sides gently convex; only moderately excavated, nearly bare, with some bristles at the vertex and on the ocellar tubercle. Face narrow, with parallel sides, flat, much receding, not at all visible in profile, with a thin row of bristles on the oral margin, otherwise wholly bare. Antennæ not as long as the head, situated near the middle of the head in profile; first joint shorter than the second, the second about as broad as long; third joint longer than the first two together, gently tapering from near its base; style slender, divaricate, about half the length of the joint. Proboscis short. Thorax moderately convex above, with bristles on the posterior part. Scutellum with a row of thin bristles on its margin. Abdomen elongate, its sides nearly parallel; moderately flattened, bare. Legs moderately stout; the first two joints of all the tarsi a little incrassate. Wings long, narrow toward the base; axillary cell narrow, the anal angle wholly wanting; alulae wholly wanting; discal cell long and narrow, the penultimate section of the fourth vein a little shorter than the ultimate section; the third vein from the discal cell, separating the third and fourth posterior cells, wholly wanting.

This genus is remarkable for the small size of its typical species, for the broadness of the front, the narrowness of the wings at the base, the absence of the alulae and the confluence of the third and fourth posterior cells. In one of the two specimens from which this description is drawn, there is a slight angulation of the vein at the posterior part of the discal cell where the missing vein should start from, but even this is wholly wanting in the other specimen. I can not believe that this character should have the importance that it might seem to have, as it is not at all improbable that congeneric species may be discovered in which the neuration is not abnormal. The very broad front, the receding face, and the narrowness of the base of the wings are, I believe, the most essential

characters of the genus. It gives me pleasure to name the genus in honor of Prof. C. H. T. Townsend, who has written so ably on North American diptera.

Townsendia minuta, n. sp.

Male. Black. Front and face thickly white pollinose; mystax white. Antennæ black. Mesonotum opaque yellowish white, with a broad median stripe and a spot on each side brown. Pleura: thinly whitish pollinose. Abdomen shining black, the first segment whitish pollinose, the pile along the sides of the anterior segments white. Legs yellowish red, the front and middle femora above, the hind femora except the base and tip, a broad ring on all the tibia, and the tarsi for the most part, black. Wings grayish hyaline. Length $3\frac{1}{2}$ millim.

Two specimens, Mexico, H. H. Smith. This species is the smallest that I know of in the family of Asilidæ.

I may mention here that the genus *Orthoncuromyia* Will. is in all probability synonymous with *Psilocurus* Loew, though the type species are very different.

Arthrostylum, gen. nov. (*Leptidæ*).

Male. Head broader than the thorax, hemispherical. Front and face narrow, of equal width. Face smooth throughout, without grooves, following the contour of the eyes and not at all visible in profile. Antennæ situated above the middle of the head in profile, with a long, terminal, jointed style; first joint a little shorter than the two following combined, second joint about as long as wide; third joint cordate; style longer than the joints preceding it, composed of five distinct segments of which the first is as wide as long and the others successively increasing in length, the last pointed at the tip and nearly as long as the four preceding it together. Thorax elongate; metanotum prominent. Abdomen long and slender, narrowed at the posterior part of the first (second?) segment, the following joints cylindrical, the hypopygium a little thicker. Legs long; the hind pair much elongated, their femora a little thickened distally; front tibiæ with a single spur, the others with two each. Wings elongate; alulæ rudimentary; fourth posterior cell and the anal cell closed near the margin.

The present genus is nearly allied to *Vermileo*, but is clearly distinct in the dichoptic male, the slender, articulated style, and the closed cells of the wings. The genus is of especial interest as adding another link between the Leptidæ and the Xylophagidæ. The style is distinctly differentiated, it is true, yet the difference

between it and the complex joint of the Xylophagidæ is one of degree and not of kind.

Arthrostylum fascipennis, n. sp.

Male. Front and face both bare, the former opaque brown, the latter opaque light yellow. Antennæ yellow; the first joint for the most part, the upper margin of the second and third joints in part, and the style wholly black. Occiput flat, gray pollinose on the sides. Mesonotum shining reddish yellow, with three black stripes, which are more or less confluent posteriorly. Pleuræ black, scarcely pollinose, yellowish in part above. Abdomen red; first (second?) segment broadly black at its base, in front of which on either side there is a yellow spot; the narrow distal end of the segment has a rounded black boss above; third segment with a smaller blackish eminence distally. Legs light yellow; the distal three joints of all the tarsi, the hind femora except their tip, and the hind tibiae except base and tip, black; the tip of the second hind tarsal joint is blackish. Wings yellowish hyaline, with two brown cross-bands, the one running from near the costa, more narrowly behind, to the tip of the anal cell; the other filling out the tip of the wing, slightly concave on the proximal border, which crosses the third vein a little before its furcation, and less deeply colored at the immediate tip of the wing. Length 10-12 millim. (the abdomen is curved downward).

One specimen. Xucumanatlan, Mexico, July (H. H. Smith.)

Figures and full descriptions of both the above flies, will shortly appear in the *Biología Centrali-Americana*.